

### REMARKS

The Applicants appreciate the thorough examination of the present application that is reflected in the Official Actions of September 8, 2004, March 28, 2005, and January 20, 2006. In particular, the Applicants appreciate the withdrawal of all rejections from the Office Actions of September 8, 2004, and March 28, 2005. In response, the Applicants have rewritten Claims 28 and 30 in dependent form. In the following remarks, the Applicants will show that all claims are patentable over the cited art.

Reconsideration of the outstanding rejections and allowance of all claims is thus respectfully requested.

#### **All Double Patenting Rejections Have Been Overcome**

Claim 28 has been rejected under the judicially created doctrine of double patenting over U.S. Patent No. 6,745,241. In response, Claim 28 has been rewritten in dependent form depending from Claim 25. Accordingly, Claim 28 is patentable at least per the patentability of Claim 25 for the reasons presented below. Accordingly, all double patenting rejections have been overcome, and no terminal disclaimer is required.

#### **Independent Claims 25, 48, And 50 Are Patentable Over Chen**

Claims 25, 48, and 50 have been rejected under 35 U.S.C. Sec. 102(e) as being anticipated by U.S. Patent No. 6,553,423 to Chen ("Chen"). The Applicant respectfully submits, however, that Claims 25, 48, and 50 are patentable over Chen for at least the reasons discussed below.

Claim 25, for example, recites a method of dynamically undeploying services in a computing network. The method of Claim 25 includes:

- receiving an undeployment trigger for a selected service;
- determining one or more network locations where the selected service is deployed; and
- effecting a dynamic undeployment by programmatically removing the selected service from one or more selected ones of the network locations;

wherein services comprise web services;  
wherein receiving an undeployment trigger comprises receiving an undeployment trigger for a selected web service in the computing network;  
wherein determining one or more network locations comprises determining one or more network locations where the selected web service is deployed in the computing network; and  
wherein effecting a dynamic undeployment comprises effecting a dynamic undeployment by programmatically removing the selected web service from one or more selected ones of the network locations in the computing network.

The Applicants respectfully submit that Chen fails to teach or suggest the recitations of Claim 25. In support of the rejection, the Office Action states that Chen teaches "receiving an undeployment trigger for a selected service; (See col. 5, lines 20-30)." The cited portions of Chen, however, state that:

After a TCP connection is established the first message sent by the neighboring peer routers is an OPEN message. As noted, the OPEN message data structure provides a means for the routers to identify themselves at the beginning of the neighboring relationship. The OPEN message includes, inter alia, an optional parameters field that contains a list of optional parameters specified by the peer routers. One optional parameter that is defined within the optional parameter field is a capabilities parameter used to introduce new features that may be supported by a peer router. (Underline added.)

Chen, col. 5, lines 20-30. Chen thus discusses an "OPEN message" including "a list of optional parameters" such as "a capabilities parameter used to introduce new features...." (Underline added.) Accordingly, Chen fails to teach or suggest receiving an "undeployment trigger" as recited in Claim 25, and in fact, the OPEN message of Chen including a list of optional parameters teaches away from the undeployment trigger of Claim 25.

For at least the reasons discussed above, the Applicants respectfully submit that Claim 25 is patentable over Chen. The Applicants further submit that Claims 48 and 50 are patentable for reasons similar to those discussed above with respect to Claim 25. In addition, dependent Claims 26 and 28-47 are patentable at least as per the patentability of Claims 25, 48, and 50 from which they depend.

**Dependent Claims 26, 32, 35-39, and 45-47 Are Patentable Over Chen In View Of Khello**

Dependent Claims 26, 32, 35-39, and 45-47 have been rejected under 35 U.S.C. Sec. 103(a) as being unpatentable over Chen in view of U.S. Patent No. 5,657,451 to Khello ("Khello"). These claims are patentable at least as per the patentability of Claims 25, 48, and 50 from which they depend. The Applicants further submit that these claims are patentable over the combination of Chen and Khello for at least the additional reasons discussed below.

As discussed in the Manual Of Patent Examining Procedure (MPEP), three basic criteria must be met to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Moreover, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *See*, MPEP, Sec. 2143.

Regarding all of Claims 26, 32, 35-39, and 45-47, there is no suggestion, teaching, or motivation in either Chen or Khello to combine Chen and Khello to somehow teach or suggest the methods of dynamically undeploying web services in a computing network as recited in Claims 26, 32, 35-39, and 45-47. In discussing each of the rejections of Claims 26, 32, 35-39, and 45-47, the Office Action states that:

it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen with the internetworking system disclosed by Khello.

Office Action, pages 9-12. Chen, however, relates to "routing protocols in a computer network" (*see* Chen, col. 1, lines 9-10, underline added) while Khello discusses a generic coordination mechanism that "solves feasible service interaction problems taking into account real-time processing constraints within telecommunications networks" (*see* Khello, Abstract, underline added). Accordingly, there is no suggestion, teaching, or motivation in either Chen or Khello to

combine Chen and Khello as suggested in the Office Action, and dependent Claims 26, 32, 35-39, and 45-47 are thus separately patentable over the prior art.

In addition, even if Chen and Khello are somehow combined, the references, when combined, fail to teach or suggest all the claim limitations of Claims 26, 32, 35-39, and 45-47 as required by MPEP, Sec. 2143. Regarding Claim 32, for example, the Office Action concedes that:

Chen is silent as to "wherein the usage is an average number of client requests for the selected service within a predetermined time interval." However, Khello does. (See col. 6, lines 1-3).

The cited portion of Khello states that:

Statistics maintenance. The mechanism maintains enhanced statistics measurements on service operations in the network.

Khello, col. 6, lines 1-3. Nothing in Khello, however, teaches or suggests that the "enhanced statistics measurements" includes an average number of client requests for a selected service within a predetermined time interval" as recited in Claim 32.

Regarding Claims 35 and 36 (both of which depend from Claim 33), the Office Action states concedes that:

Chen is silent as to "wherein a value of the predetermined threshold applies to a plurality of deployed services." However, Khello does. (See col. 5, lines 52-54).

and that:

Chen is silent as to "wherein the predetermined threshold applies individually to the selected service." However, Khello does (See col. 5, lines 52-54).

The cited portion of Khello states that:

Service restriction. The mechanism does not allow a service to be activated or invoked unless its specified service interactions are checked without resulting in an interference.

Khello, col. 5, lines 55-58. Accordingly, Khello also fails to teach or suggest a threshold used to determine when to send an undeployment trigger (as recited in Claim 33 from which Claims 35

and 36 depend), much less a threshold applying to a plurality of deployed services as recited in Claim 35 or a threshold applying individually to a selected service as recited in Claim 36.

In addition, each of Claims 35-39 depends from Claim 33, and each of Claim 35-39 includes all recitations of Claim 33. The Office Action, however, concedes that:

Chen and Khello do not explicitly disclose "further comprising comparing the usage of the selected service to a predetermined threshold, and sending the undeployment trigger when the usage falls below the predetermined threshold."

Office Action, page 13. Accordingly, Claims 35-39 are separately patentable over the combination of Chen and Khello.

**Claims 29, 33-34, And 40-44 Are Patentable Over Chen, Khello, And Reifer**

Claims 29, 33-34, and 40-44 have been rejected under 35 U.S.C. Sec. 103(a) as being unpatentable over Chen in view of Khello in further view of U.S. Patent No. 6,421,727 to Reifer *et al.* ("Reifer"). These claims are patentable at least as per the patentability of Claims 25, 48, and 50 from which they depend. The Applicants further submit that these claims are separately patentable over the combination of Chen and Khello for at least the additional reasons discussed below.

As discussed above with respect to Claims 26, 32, 35-39, and 45-47, there is no suggestion, teaching, or motivation in either Chen or Khello to combine Chen and Khello to somehow teach or suggest the methods of dynamically undeploying web services in a computing network. Briefly, it would not be obvious to combine aspects of the computer network of Chen with the telecommunications networks of Khello to teach or suggest methods of dynamically undeploying web services in a computing network as recited in the claims of the present invention. For similar reasons, it would not be obvious to combine the "systems for operating and managing a telecommunications network" of Reifer (*see*, Reifer, col. 1, lines 6-9, underline added) with Chen and Khello to teach or suggest a method of dynamically undeploying web services in a computing network. Accordingly, there is no suggestion, teaching, or motivation in either Chen, Khello, and/or Reifer to combine Chen, Khello, and Reifer as suggested in the

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Office Action, and dependent Claims 29, 33-34, and 40-44 are thus separately patentable over the prior art.

In addition, even if Chen, Khello, and Reifer are somehow combined, the references, when combined, fail to teach or suggest all the claim limitations of Claims 29, 33-34, and 40-44 as required by MPEP, Sec. 2143. Regarding Claim 33, for example, the Office Action states that:

Chen and Khello do not explicitly disclose "further comprising comparing the usage of the selected service to a predetermined threshold, and sending the undeployment trigger when the usage falls below the predetermined threshold."  
However, Reifer teaches usage comparison at col. 5, lines 13-16.

The cited portions of Reifer state that:


FIG. 5 illustrates in more detail the processes of the business subsystems of the preferred embodiment of the business system 400 in the usage management of the telecommunications network 100, including the BSS 430.

Reifer thus fails to provide the missing teachings relating to comparing usage of a selected service to a predetermined threshold, and/or sending an undeployment trigger when the usage falls below the predetermined threshold as recited in Claim 33.

### CONCLUSION

Accordingly, the Applicant submits that all pending claims in the present application are in condition for allowance, and allowance of all claims is respectfully requested in due course.

Respectfully submitted,

  
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